



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 111585

TO: Michael Lavilla
Location: REM 5e79
Wednesday, January 07, 2004
Art Unit: 1775
Phone: 272-1539
Serial Number: 09 / 804705

From: Jan Delaval
Location: Biotech-Chem Library
Remsen Building – 1A51
Phone: 571-272-2504

jan.delaval@uspto.gov

Search Notes

SEARCH REQUEST FORM

111 585

Requestor's Name: La Villa Serial Number: 09/804,705
Date: 1/7/04 Phone: 2-7539 Art Unit: 1775

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

please do structure/CRN search as appropriate.

STAFF USE ONLY

Date completed: 1/7/04
Searcher: Case
Terminal time: _____
Elapsed time: _____
CPU time: 15745
Total time: _____
Number of Searches: _____
Number of Databases: _____

Search Site

☒ STIC
☐ CM-1
☐ Pre-S

Type of Search

☐ N.A. Sequence
☐ A.A. Sequence
☒ Structure
☐ Bibliographic

Vendors

☐ IG Suite
☒ STN
☐ Dialog
☐ APS
☐ Geninfo
☐ SDC
☐ DARC/Questel
☐ Other

=> d his

(FILE 'HOME' ENTERED AT 14:02:39 ON 07 JAN 2004)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 14:02:52 ON 07 JAN 2004

L1 91 S ?PEROXYMALEIC? ACID
L2 6 S ?PEROXY MALEIC? ACID
L3 97 S L1,L2
L4 50 S L3 (L) ?BUTYL?

FILE 'REGISTRY' ENTERED AT 14:03:55 ON 07 JAN 2004

L5 1 S 1931-62-0
E C8H12O5/MF
L6 727 S E3
L7 3 S L6 AND PROPENEPEROX?
L8 3 S L5,L7
SEL RN
L9 4 S E1-E3/CRN
L10 1 S L9 AND CA
L11 4 S L8,L10

FILE 'HCAPLUS' ENTERED AT 14:06:44 ON 07 JAN 2004

L12 128 S L11
L13 24 S (TBU OR TBUTYL OR TERTBUTYL OR (T OR TERT)()BUTYL OR BUTYL)()
L14 0 S (TBU OR TBUTYL OR TERTBUTYL OR (T OR TERT)()BUTYL OR BUTYL)(L
L15 2 S LUPERCO PMA 25 OR PERBUTYL MA 25
L16 18 S TERT BUTYL PEROXYMALEATE
L17 0 S TERT BUTYL PEROXY MALEATE
L18 7 S TERT BUTYLPEROXY MALEATE
L19 4 S TERT BUTYLPEROXY MALEIC ACID
L20 10 S MALEIC MONOPEROXYACID (L) TERT BUTYL ESTER
L21 10 S MALEIC MONOPEROXYACID (L) BUTYL ESTER
L22 22 S TERT BUTYLPEROXYMALEIC ACID
L23 1 S 3 CARBOXY 2 PROPENEPEROXOIC ACID (L) DIMETHYLETHYL ESTER
L24 1 S TERT BUTYL PEROXY MALEIC ACID
L25 11 S LUPEROX PMA OR PERBUTYL MA
L26 1 S TERT BUTYL MONOPEROXY MALEATE
L27 143 S L12-L26
L28 2 S L27 AND (CA OR CALCIUM OR ZN OR ZINC)()STEARATE

FILE 'REGISTRY' ENTERED AT 14:15:42 ON 07 JAN 2004

FILE 'REGISTRY' ENTERED AT 14:15:51 ON 07 JAN 2004

L29 2 S 557-05-1 OR 1592-23-0
L30 1 S 57-11-4
L31 3702 S 57-11-4/CRN
L32 113 S L31 AND (CA OR MG OR PB OR BA OR CD OR ZN)
L33 109 S L31 AND (CALCIUM OR MAGNESIUM OR LEAD OR BARIUM OR CADMIUM OR
L34 114 S L32,L33
L35 22 S L34 AND 2/NC
L36 10 S L35 NOT IDS/CI
L37 100 S L34 AND C18H36O2
L38 10 S L37 AND L35
L39 10 S L36,L38
L40 9 S L39 NOT S/ELS
L41 90 S L37 NOT L38
L42 28 S L41 AND NR>=1
L43 62 S L41 NOT L42
L44 57 S L43 NOT (UNSPECIFIED OR IDS/CI)
L45 38 S L44 NOT MXS/CI
L46 34 S L45 NOT (COMPD OR WITH)
L47 32 S L46 NOT AYS/CI

L48 42 S L29,L30,L40,L47

FILE 'HCAPLUS' ENTERED AT 14:19:55 ON 07 JAN 2004

L49 1 S L48 AND L27

FILE 'REGISTRY' ENTERED AT 14:20:05 ON 07 JAN 2004

L50 1 S SILICA/CN

FILE 'HCAPLUS' ENTERED AT 14:20:10 ON 07 JAN 2004

L51 5 S L50 AND L27

L52 7 S (SIO2 OR SILICA OR SILCON DIOXIDE) AND L27

L53 9 S L28,L49,L51,L52

SEL DN AN 2

L54 1 S L53 AND E4-E6

E MYERS T/AU

L55 36 S E3,E35,E36

E ATOFINA/PA,CS

L56 613 S E2-E4

E ATO FINA/PA,CS

L57 1 S E5-E8

L58 2 S L27 AND L55-L57

L59 2 S L54,L58

FILE 'REGISTRY' ENTERED AT 14:24:00 ON 07 JAN 2004

FILE 'HCAPLUS' ENTERED AT 14:24:08 ON 07 JAN 2004

SET SMARTSELECT ON

L60 SEL L27 1- RN : 1114 TERMS

SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 14:24:13 ON 07 JAN 2004

L61 1114 S L60

L62 STR

L63 33 S L62 SAM SUB=L61

L64 521 S L62 FUL SUB=L61

SAV L64 LAVILLA804/A

L65 66 S L64 AND (LI OR NA OR K OR CA OR MG OR PB OR BA OR CD OR ZN OR

L66 18 S L64 AND (LITHIUM OR SODIUM OR POTASSIUM OR CALCIUM OR MAGNESI

L67 66 S L65,L66

L68 17 S L67 AND NR>=1

L69 32 S L67 AND PMS/CI

L70 25 S L67 NOT L68,L69,L48

L71 2 S L70 AND C8H16O2

L72 1 S L71 NOT CO/ELS

FILE 'HCAPLUS' ENTERED AT 14:30:17 ON 07 JAN 2004

L73 1 S L72 AND L27

L74 1 S L27 AND MINERAL(L)OIL

L75 2 S L59 AND L1-L4,L12-L28,L49,L51-L59,L73,L74

SEL HIT RN

FILE 'REGISTRY' ENTERED AT 14:31:46 ON 07 JAN 2004

L76 4 S E1-E4

=> d que 164

L5 1 SEA FILE=REGISTRY ABB=ON PLU=ON 1931-62-0

L6 727 SEA FILE=REGISTRY ABB=ON PLU=ON C8H12O5/MF

L7 3 SEA FILE=REGISTRY ABB=ON PLU=ON L6 AND PROPENEPEOX?

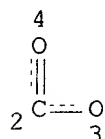
L8 3 SEA FILE=REGISTRY ABB=ON PLU=ON (L5 OR L7)

L9 4 SEA FILE=REGISTRY ABB=ON PLU=ON (1931-62-0/CRN OR 24491-54-1/
CRN OR 4701-20-6/CRN)

L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON L9 AND CA

L11 4 SEA FILE=REGISTRY ABB=ON PLU=ON (L8 OR L10)

L12' 128 SEA FILE=HCAPLUS ABB=ON PLU=ON L11
 L13 24 SEA FILE=HCAPLUS ABB=ON PLU=ON (TBU OR TBUTYL OR TERTBUTYL
 OR (T OR TERT) (W) BUTYL OR BUTYL) (W) (PEROXYMALEIC ACID OR
 MONOPEROXYMALEATE)
 L14 0 SEA FILE=HCAPLUS ABB=ON PLU=ON (TBU OR TBUTYL OR TERTBUTYL
 OR (T OR TERT) (W) BUTYL OR BUTYL) (L) MALEIC MONOPEROXIDE
 L15 2 SEA FILE=HCAPLUS ABB=ON PLU=ON LUPERCO PMA 25 OR PERBUTYL MA
 25
 L16 18 SEA FILE=HCAPLUS ABB=ON PLU=ON TERT BUTYL PEROXYMALEATE
 L17 0 SEA FILE=HCAPLUS ABB=ON PLU=ON TERT BUTYL PEROXY MALEATE
 L18 7 SEA FILE=HCAPLUS ABB=ON PLU=ON TERT BUTYLPEROXY MALEATE
 L19 4 SEA FILE=HCAPLUS ABB=ON PLU=ON TERT BUTYLPEROXY MALEIC ACID
 L20 10 SEA FILE=HCAPLUS ABB=ON PLU=ON MALEIC MONOPEROXYACID (L)
 TERT BUTYL ESTER
 L21 10 SEA FILE=HCAPLUS ABB=ON PLU=ON MALEIC MONOPEROXYACID (L)
 BUTYL ESTER
 L22 22 SEA FILE=HCAPLUS ABB=ON PLU=ON TERT BUTYLPEROXYMALEIC ACID
 L23 1 SEA FILE=HCAPLUS ABB=ON PLU=ON 3 CARBOXY 2 PROPENEPEROXOIC
 ACID (L) DIMETHYLETHYL ESTER
 L24 1 SEA FILE=HCAPLUS ABB=ON PLU=ON TERT BUTYL PEROXY MALEIC ACID
 L25 11 SEA FILE=HCAPLUS ABB=ON PLU=ON LUPEROX PMA OR PERBUTYL MA
 L26 1 SEA FILE=HCAPLUS ABB=ON PLU=ON TERT BUTYL MONOPEROXY MALEATE
 L27 143 SEA FILE=HCAPLUS ABB=ON PLU=ON (L12 OR L13 OR L14 OR L15 OR
 L16 OR L17 OR L18 OR L19 OR L20 OR L21 OR L22 OR L23 OR L24 OR
 L25 OR L26)
 L60 SEL PLU=ON L27 1- RN : 1114 TERMS
 L61 1114 SEA FILE=REGISTRY ABB=ON PLU=ON L60
 L62 STR



NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE
 L64 521 SEA FILE=REGISTRY SUB=L61 SSS FUL L62

=> d ide can tot 176

L76 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 7631-86-9 REGISTRY
 CN Silica (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 1165MP
 CN 175GR
 CN 300CF
 CN 30R50
 CN 30R7
 CN 3K
 CN 3KS
 CN 400G

CN 400WQ
CN 5X
CN 937L
CN 940UP
CN 955W
CN 980H
CN A 150
CN A 175
CN A 200
CN A 300
CN A 380
CN Acematt HK 400
CN Acematt TS 100
CN Acrifix 122
CN Acticel
CN Adelite 20N
CN Adelite 30
CN Adelite A
CN Adelite AD 321
CN Adelite AT
CN Adelite AT 20
CN Adelite AT 20A
CN Adelite AT 20N
CN Adelite AT 20Q
CN Adelite AT 20S
CN Adelite AT 30
CN Adelite AT 30A
CN Adelite AT 30B
CN Adelite AT 30S
CN Adelite AT 40
CN Adelite AT 50
CN Adelite BT 55
CN Adelite BT 59
CN Adelite CT 100
CN Adelite CT 300
CN Admafina C 5
CN Admafina SD 25R
CN Admafina SE 5100
CN Admafina SO-C 1
CN Admafina SO-C 5
CN Admafina SO-E 1
CN Admafina SO-E 2

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

FS 3D CONCORD

DR 11139-72-3, 11139-73-4, 12125-13-2, 12737-36-9, 12753-63-8, 12765-74-1,
12774-28-6, 9049-77-8, 1340-09-6, 172306-09-1, 173299-41-7, 127689-16-1,
127831-27-0, 126879-14-9, 126879-30-9, 126879-49-0, 53468-64-7,
125623-17-8, 56645-27-3, 56731-06-7, 122985-48-2, 55599-33-2, 60572-11-4,
62655-73-6, 97343-62-9, 97709-14-3, 98226-40-5, 98253-25-9, 67167-16-2,
113384-41-1, 50813-13-3, 50926-93-7, 50935-83-6, 51542-57-5, 51542-58-6,
61673-46-9, 108727-71-5, 136881-80-6, 37220-24-9, 37241-25-1, 37334-65-9,
37340-45-7, 37380-93-1, 139074-73-0, 137263-03-7, 145537-54-8,
145686-91-5, 145808-77-1, 70536-23-1, 70563-35-8, 78207-17-7, 146585-72-0,
152206-35-4, 152787-33-2, 155552-25-3, 155575-05-6, 83589-56-4,
83652-92-0, 149779-02-2, 87501-59-5, 89493-21-0, 39336-66-8, 39372-58-2,
39409-25-1, 39443-40-8, 39456-81-0, 52350-43-3, 107497-59-6, 179046-03-8,
184654-53-3, 185461-90-9, 188357-77-9, 191289-29-9, 206770-31-2,
207868-97-1, 217643-58-8, 250579-70-5, 250579-78-3, 264907-28-0,
330152-64-2, 341028-71-5, 368432-40-0, 402828-37-9, 402828-39-1,
402828-40-4

MF 02 Si
CI COM

LC · STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

O=Si=O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

288018 REFERENCES IN FILE CA (1907 TO DATE)
5505 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
288377 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:22418
REFERENCE 2: 140:22366
REFERENCE 3: 140:22327
REFERENCE 4: 140:22254
REFERENCE 5: 140:22253
REFERENCE 6: 140:22250
REFERENCE 7: 140:22247
REFERENCE 8: 140:22240
REFERENCE 9: 140:22239
REFERENCE 10: 140:22229

L76 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN

RN 1931-62-0 REGISTRY

CN 2-Propeneperoxoic acid, 3-carboxy-, 1-(1,1-dimethylethyl) ester, (2Z)-
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Propeneperoxoic acid, 3-carboxy-, 1-(1,1-dimethylethyl) ester, (Z)-

CN Maleic monoperoxyacid, 1-tert-butyl ester (8CI)

CN Maleic monoperoxyacid, OO-tert-butyl ester (6CI, 7CI)

OTHER NAMES:

CN Luperco PMA 25

CN Perbutyl MA 25

CN tert-Butyl monopermaleate

CN tert-Butyl monoperoxymaleate

CN tert-Butyl peroxyaleate

CN tert-Butyl peroxyaleic acid

FS STEREOSEARCH

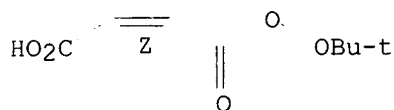
MF C8 H12 O5

CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CIN,

CSChem, IFICDB, IFIPAT, IFIUDb, MSDS-OHS, SPECINFO, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

119 REFERENCES IN FILE CA (1907 TO DATE)
 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 119 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:261786
 REFERENCE 2: 139:222685
 REFERENCE 3: 139:70002
 REFERENCE 4: 138:305307
 REFERENCE 5: 138:289085
 REFERENCE 6: 138:289084
 REFERENCE 7: 137:338180
 REFERENCE 8: 137:186391
 REFERENCE 9: 136:403225
 REFERENCE 10: 136:387479

L76 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 1592-23-0 REGISTRY
 CN Octadecanoic acid, calcium salt (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 15F
 CN 15F (stabilizer)
 CN Adekafin Efukodesupa C
 CN Afco-Disper C
 CN Aquacal
 CN Baerlocher 5862
 CN BD 853
 CN C 104HS
 CN Calcium bis(stearate)
 CN Calcium distearate
 CN Calcium octadecanoate
 CN Calcium stearate
 CN Calcium Stearate CP
 CN Calcium Stearate CP-S
 CN Calcium Stearate G
 CN Calcium Stearate GF 200
 CN Calcium Stearate S
 CN Calcium Stearate U

CN · Calsan 50
 CN Calstar
 CN Ceasit I
 CN CS 1
 CN CS 1 (soap)
 CN Daiwax C
 CN Darapel
 CN DEF 960
 CN Dry Block
 CN Dry-Block II
 CN Dymsol CSD
 CN Ferro
 CN Flexichem
 CN Flexichem CS
 CN Flowco 53
 CN G 339S
 CN GF 200
 CN Hydense 5862
 CN L 155
 CN L 155 (stearate)
 CN LB Coat LB 131(50)
 CN Lubrical 48
 CN MCA 2
 CN MCA 2 (support)
 CN Mortarplus
 CN Nissan Calcium Stearate S
 CN Nopcote C 104
 CN Nopcote C 104-50
 CN Nopcote C 104HS
 CN PBK
 CN Petrac CP 11LS
 CN Radiastar 1060

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DR 7490-87-1, 8000-75-7, 177771-85-6, 105478-11-3, 37325-26-1, 169526-51-6

MF C18 H36 O2 . 1/2 Ca

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST,
 CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE,
 ENCOMPLIT2, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT,
 IFIUDB, IPA, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*,
 SPECINFO, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

CRN (57-11-4)

HO₂C-(CH₂)₁₆-Me

● 1/2 Ca

6182 REFERENCES IN FILE CA (1907 TO DATE)

22 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

6190 REFERENCES IN FILE CAPLUS (1907 TO DATE)

13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:19837

REFERENCE, 2: 140:18401
REFERENCE 3: 140:17464
REFERENCE 4: 140:8857
REFERENCE 5: 140:7825
REFERENCE 6: 140:6781
REFERENCE 7: 139:401491
REFERENCE 8: 139:396521
REFERENCE 9: 139:388451
REFERENCE 10: 139:386443

L76 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN 557-05-1 REGISTRY

CN Octadecanoic acid, zinc salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Stearic acid, zinc salt (8CI)

OTHER NAMES:

CN ACF

CN Afco-Disper ZD

CN Coad 20

CN Daiwax ZP

CN Dermarone

CN Dibasic zinc stearate

CN Disperso D

CN DLG 20

CN Efukokemu ZNS-P

CN F 115

CN F 155

CN F 155 (salt)

CN F 930

CN GF 200

CN Hidorin D 523

CN Hidorin E 366

CN Hidorin E 619

CN Hidorin F 115

CN Hidorin F 930

CN Hidorin L 111

CN Hidorin SZ 40

CN Hidorin Z 7

CN Hidorin Z 7-30

CN Hymicron F 930

CN Hymicron LIII

CN Hymicron Z 7-30

CN Hymicron ZK 349

CN KV 85A1

CN L 111

CN Liquazinc AQ 90

CN Lubrazinc W

CN Metallac

CN Metasap 576

CN MR 450

CN MZN 2

CN Petrac ZN 44HS

CN PG 2000

CN R 1004

CN RSN 131HS

CN * SAK-ZS-P
 CN SAK-ZS-PLB
 CN Stavivor Cecavon ZN
 CN Stavivor ZN-E
 CN Synpro ABG
 CN Synpro ACF
 CN Synpro DLG 20
 CN Synpro stearate
 CN SZ 2000
 CN SZ-DF 2

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DR 8028-87-3, 72535-55-8

MF C18 H36 O2 . 1/2 Zn

CI COM

LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS,
 CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
 DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
 ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
 MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO,
 TOXCENTER, TULSA, USAN, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

CRN (57-11-4)

HO₂C-(CH₂)₁₆-Me

● 1/2 Zn

6074 REFERENCES IN FILE CA (1907 TO DATE)
 25 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 6082 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 31 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:21809
 REFERENCE 2: 140:21243
 REFERENCE 3: 140:21241
 REFERENCE 4: 140:10706
 REFERENCE 5: 140:10453
 REFERENCE 6: 140:8857
 REFERENCE 7: 140:8824
 REFERENCE 8: 140:8799
 REFERENCE 9: 140:6260
 REFERENCE 10: 140:5861

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 14:32:20 ON 07 JAN 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 7 Jan 2004 VOL 140 ISS 2
 FILE LAST UPDATED: 6 Jan 2004 (20040106/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr tot 175

L75 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:709734 HCAPLUS

DN 135:242680

ED Entered STN: 28 Sep 2001

TI Preparation of stabilized and free-flowing solid tertiary-
butylperoxy maleic acid compositions

IN Myers, Terry Ned

PA Atofina Chemicals, Inc., USA

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C07C409-38

ICS C08F004-34; C08K005-14

CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 23

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1136473	A1	20010926	EP 2001-106404	20010321
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2001044497	A1	20011122	US 2001-804705	20010313
	BR 2001001116	A	20011204	BR 2001-1116	20010321
	CN 1374335	A	20021016	CN 2001-116254	20010321
PRAI	US 2000-190795P	P	20000321		
	US 2001-804705	A	20010313		
AB	Stabilized, solid, free-flowing compns. based on tert-butylperoxy maleic acid as well as processes for their preparation and use are described.				
ST	butylperoxy maleic acid powder prepn				
IT	Esters; uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (peroxy; preparation of stabilized and free-flowing solid tertiary- butylperoxy maleic acid compns.)				
IT	Paraffin oils				
	RL: MOA (Modifier or additive use); USES (Uses) (preparation of stabilized and free-flowing solid tertiary- butylperoxy maleic acid compns.)				
IT	7631-86-9, Silica, uses				

• RL: MOA (Modifier or additive use); USES (Uses)
 (amorphous; preparation of stabilized and free-flowing solid tertiary-
butylperoxy maleic acid compns.)

IT 557-05-1, Zinc stearate 1592-23-0,
 Calcium stearate
 RL: MOA (Modifier or additive use); USES (Uses)
 (preparation of stabilized and free-flowing solid tertiary-
butylperoxy maleic acid compns.)

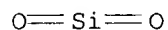
IT 1931-62-0, tert-Butylperoxy maleic
 acid
 RL: TEM (Technical or engineered material use); USES (Uses)
 (preparation of stabilized and free-flowing solid tertiary-
butylperoxy maleic acid compns.)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
 (1) Nv Chefaro Maatschappij; GB 1195083 A 1970
 (2) Sanchez, J; US 4387044 A 1983 HCAPLUS
 (3) Slocum, D; US 3405088 A 1968
 (4) Wylegala, K; US 4455252 A 1984 HCAPLUS

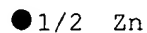
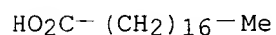
IT 7631-86-9, Silica, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (amorphous; preparation of stabilized and free-flowing solid tertiary-
butylperoxy maleic acid compns.)

RN 7631-86-9 HCAPLUS
 CN Silica (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

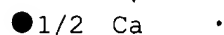
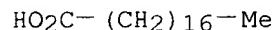


IT 557-05-1, Zinc stearate 1592-23-0,
 Calcium stearate
 RL: MOA (Modifier or additive use); USES (Uses)
 (preparation of stabilized and free-flowing solid tertiary-
butylperoxy maleic acid compns.)

RN 557-05-1 HCAPLUS
 CN Octadecanoic acid, zinc salt (9CI) (CA INDEX NAME)



RN 1592-23-0 HCAPLUS
 CN Octadecanoic acid, calcium salt (9CI) (CA INDEX NAME)

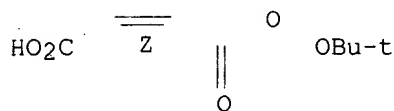


IT 1931-62-0, tert-Butylperoxy maleic
 acid
 RL: TEM (Technical or engineered material use); USES (Uses)
 (preparation of stabilized and free-flowing solid tertiary-
butylperoxy maleic acid compns.)

RN 1931-62-0 HCAPLUS

CN • 2-Propeneperoxoic acid, 3-carboxy-, 1-(1,1-dimethylethyl) ester, (2Z)-
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L75 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:756754 HCAPLUS
DN 133:322570
ED Entered STN: 27 Oct 2000
TI Method for the production of a controlled rheological propylene resin
IN Bertin, Denis; Robert, Patrice
PA Atofina, Fr.
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DT Patent
LA French
IC ICM C08F008-50
CC 37-3 (Plastics Manufacture and Processing)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000063260	A1	20001026	WO 2000-FR1026	20000419
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2792321	A1	20001020	FR 1999-4888	19990419
FR 2792321	B1	20031212		
EP 1192192	A1	20020403	EP 2000-920844	20000419
EP 1192192	B1	20030326		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002542346	T2	20021210	JP 2000-612345	20000419
AT 235521	E	20030415	AT 2000-920844	20000419
US 6620892	B1	20030916	US 2002-959278	20020220
PRAI FR 1999-4888	A	19990419		
WO 2000-FR1026	W	20000419		

AB The invention relates to a method for the production of a controlled rheol. homopolymer or copolymer of propylene or a composition comprising a homopolymer or copolymer of propylene in the absence of a functional monomer. The inventive method increases the melt flow index of the resin by cutting the chains using a polymerization initiator and is characterized in that at least

one

stable free radical is incorporated into the resin in a viscous state, whereupon a solid product is formed having an increased melt flow index. The stable free radical or radicals are more particularly chosen from nitroxyl radicals, containing at least one group :NO•.

ST melt flow enhancement propylene polymer; polymn initiator degrdn propylene polymer; nitroxyl incorporation propylene polymer

IT Polymer degradation
Polymerization catalysts

(manufacture of propylene polymers with increased melt flow by degradation
with polymerization catalysts and incorporation of nitroxyl radicals)

IT Nitroxides

RL: MOA (Modifier or additive use); USES (Uses)

(manufacture of propylene polymers with increased melt flow by degradation
with polymerization catalysts and incorporation of nitroxyl radicals)

IT 2154-68-9, 3-Carboxy-2,2,5,5-tetramethylpyrrolidinyloxy 2226-96-2,
TEMPOL 2516-92-9, Bis(1-oxyl-2,2,6,6-tetramethylpiperidin-4-yl) sebacate
2525-39-5, 2,4,6-Tri-tert-butylphenoxy 2564-83-2, TEMPO 2896-70-0,
4-Oxo-2,2,6,6-tetramethyl-1-piperidinyloxy 3229-53-6, 2,2,5,5
Tetramethyl-1-pyrrolidinyloxy 61015-94-9, N-tert-Butyl-1-phenyl-2-methyl
propyl nitroxide 95407-69-5, 4-Methoxy-2,2,6,6-tetramethyl-1-
piperidinyloxy 188526-94-5, N-tert-Butyl-1-diethylphosphono-2,2-
dimethylpropyl nitroxide 188707-72-4, N-tert-Butyl-1-dibenzylphosphono-
2,2-dimethyl propyl nitroxide 200345-02-4, N-tert-Butyl-1-(2-naphthyl)-2-
methyl propyl nitroxide 200345-03-5, N-Phenyl-1-diethylphosphono-2,2-
dimethyl propyl nitroxide 200345-04-6, N-Phenyl-1-diethylphosphono-1-
methyl ethyl nitroxide 200345-05-7, N-(1-Phenyl 2-methyl
propyl)-1-diethylphosphono-1-methyl ethyl nitroxide 258354-63-1,
N-tert-Butyl-[(1-diethylphosphono)-2-methylpropyl] nitroxide
261527-17-7, N-tert-Butyl-1-di(2,2,2-trifluoroethyl)phosphono-2,2-dimethyl
propyl nitroxide 263355-91-5 302906-69-0, N-(1-Phenylbenzyl)-[(1-
diethylphosphono)-1-methyl ethyl] nitroxide

RL: MOA (Modifier or additive use); USES (Uses)

(manufacture of propylene polymers with increased melt flow by degradation
with polymerization catalysts and incorporation of nitroxyl radicals)

IT 9003-07-0, Polypropylene 106565-43-9, Ethylene-propylene block copolymer
RL: PEP (Physical, engineering or chemical process); POF (Polymer in
formulation); PRP (Properties); PROC (Process); USES (Uses)

(manufacture of propylene polymers with increased melt flow by degradation
with polymerization catalysts and incorporation of nitroxyl radicals)

IT 75-91-2, tert-Butyl hydroperoxide 78-63-7, 2,5-Bis(tert-butylperoxy)-2,5-
dimethylhexane 78-67-1, 2,2'-Azobis(isobutyronitrile) 80-15-9, Cumyl
hydroperoxide 80-47-7, p-Menthane hydroperoxide 94-36-0, Benzoyl
peroxide, reactions 105-74-8, Lauroyl peroxide 107-71-1, tert-Butyl
peroxyacetate 109-13-7, tert-Butyl peroxyisobutyrate 110-05-4,
Di-tert-butyl peroxide 614-45-9, tert-Butyl peroxybenzoate 686-31-7,
tert-Amyl peroxy-2-ethylhexanoate 762-12-9, Decanoyl peroxide
927-07-1, tert-Butyl peroxyvalerate 995-33-5, Butyl 4,4-di(tert-
butylperoxy)valerate 1068-27-5, 2,5-Dimethyl-2,5-di(tert-butylperoxy)-3-
hexyne 1561-49-5, Dicyclohexyl peroxydicarbonate 1931-62-0,
tert-Butyl peroxy maleate 2167-23-9,
2,2-Di(tert-butylperoxy)butane 2212-81-9 2372-21-6,
OO-tert-butyl-O-isopropylmonoperoxy carbonate 2618-77-1,
2,5-Dimethyl-2,5-di(benzoylperoxy)hexane 3006-82-4, tert-Butyl
peroxy-2-ethylhexanoate 3006-86-8, 1,1-Di(tert-butylperoxy)cyclohexane
3025-88-5, 2,5-Dimethyl-2,5-di(hydroperoxy)hexane 3088-74-2,
2,2-Bis(4,4-di-tert-butylperoxycyclohexyl)propane 3179-56-4, Acetyl
cyclohexylsulfonyl peroxide 3425-61-4, tert-Amyl hydroperoxide
3457-61-2, tert-Butyl cumyl peroxide 3851-87-4, 3,5,5-Trimethylhexanoyl
peroxide 4419-11-8, 2,2'-Azobis(2,4-dimethylvaleronitrile) 6731-36-8,
1,1-Di(tert-butylperoxy)-3,3,5-trimethylcyclohexane 10508-09-5,
Di-tert-amyl peroxide 13052-09-0 13122-18-4, tert-Butyl
peroxy-3,5,5-trimethylhexanoate 13472-08-7, 2,2'-Azobis(2-
methylbutyronitrile) 15545-97-8, 2,2'-Azobis(2,4-dimethyl-4-
methoxyvaleronitrile) 15667-10-4, 1,1-Di(tert-amylperoxy)cyclohexane
16111-62-9, Di(2-ethylhexyl) peroxydicarbonate 22397-33-7,
3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane 25251-51-8,
3-Phenyl-3-tert-butylperoxyphthalide 26637-80-9, Diisopropylbenzene

- monohydroperoxide 26748-41-4, tert-Butyl peroxyneodecanoate 26748-47-0, α -Cumyl peroxyneodecanoate 27836-52-8, tert-Butyl peroxyisononanoate 29240-17-3, tert-Amyl peroxy-pivalate 34443-12-4, OO-tert-butyl-O-(2-ethylhexyl)monoperoxy carbonate 40888-97-9, 2,2'-Azobis(2-acetoxyp propane) 51241-23-7, 2,2'-Azobis(cyclohexanenitrile) 55794-20-2, Ethyl 3,3-di(tert-butylperoxy)butyrate 67567-23-1, Ethyl 3,3-di(tert-amylperoxy)butyrate 68299-16-1, tert-Amyl peroxyneodecanoate 68860-54-8, tert-Amyl peroxy-3,5,5-trimethylhexanoate 70833-40-8, OO-tert-amyl-O-(2-ethylhexyl)monoperoxy carbonate 95718-78-8, 3-Hydroxy-1,1-dimethylbutyl peroxyneodecanoate

RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of propylene polymers with increased melt flow by degradation

with

polymerization catalysts and incorporation of nitroxyl radicals)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ciba Specialty Chemicals Holding Inc; WO 9749737 A 1997 HCAPLUS
- (2) Elf Atochem S A; EP 0837080 A 1998 HCAPLUS
- (3) Esso Research And Engineering Company; FR 2132780 A 1972 HCAPLUS
- (4) Kayaku Noury Corporation; EP 0264156 A 1988 HCAPLUS
- (5) Lentia Gmbh Chem Und Pharm Erzeugnisse; DE 1694563 A 1970 HCAPLUS
- (6) Pcd-Polymere Gmbh; EP 0632062 A 1995 HCAPLUS
- (7) Scott, G; WO 8501508 A 1985 HCAPLUS
- (8) Witco Corporation; EP 0853090 A 1998 HCAPLUS

IT 1931-62-0, tert-Butyl peroxy-maleate

RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of propylene polymers with increased melt flow by degradation

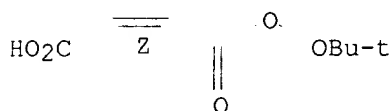
with

polymerization catalysts and incorporation of nitroxyl radicals)

RN 1931-62-0 HCAPLUS

CN 2-Propeneperoxoic acid, 3-carboxy-, 1-(1,1-dimethylethyl) ester, (2Z)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.



=> => fil uspatall

FILE 'USPATFULL' ENTERED AT 14:42:47 ON 07 JAN 2004

CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 14:42:47 ON 07 JAN 2004

CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs kwic

L87 ANSWER 1 OF 1 USPATFULL on STN

AN 2001:212500 USPATFULL

TI Safe, free-flowing solid peroxide compositions

IN Myers, Terry Ned, Phoenixville, PA, United States

PI US 2001044497 A1 20011122

AI US 2001-804705 A1 20010313 (9)

PRAI US 2000-190795P 20000321 (60)

DT Utility

FS APPLICATION

LREP Royal E. Bright, ATOFINA Chemicals, Inc., Patent Department - 26th

Floor, 2000 Market Street, Philadelphia, PA, 19103-3222

CLMN Number of Claims: 7

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 422

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Safety stabilized solid, free-flowing compositions based on t-butyl peroxy maleic acid as well as processes for their preparation and use are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM [0001] This invention relates to compositions of t-butyl peroxy maleic acid containing solid diluents and methods of using these compositions in polymer modification; more particularly this invention relates to compositions of.

SUMM [0008] None of the above art references describes the instant invention. Although t-butyl peroxy maleic acid is mentioned in two of the references, no examples were described using this peroxide. Yet there is still a need for appropriate commercial formulations of t-butyl peroxy maleic acid. This is primarily due to safety and handling considerations. Packaging and shipping regulations for this peroxide restrict transport of pure t-butyl peroxy maleic acid to 25 kilogram packages for safety reasons (see Recommendations on the Transport of Dangerous Goods, Model Regulations, 10.sup.th revised edition, . . . no one diluent meets the needs of all end use applications. The instant invention is for novel, extended formulations of t-butyl peroxy maleic acid that are acceptable for use in many commercial applications.

SUMM [0009] This invention provides a safe, free-flowing, solid, peroxide formulation consisting essentially of 40-85% by weight of solid t-butyl peroxy maleic acid, 15-60% by weight of a solid diluent selected from salts of structure (R--CO.sub.2).sub.xM.sup.(+x).sub.y wherein x is an integer selected from.

SUMM [0010] It has now been discovered that a free-flowing, solid t-butyl peroxy maleic acid composition can be significantly safer with respect to burning ignition and thermal stability than previous free-flowing, solid compositions of the.

SUMM [0012] Calcium Stearate

SUMM [0013] Zinc Stearate

SUMM [0061] Suitable optional free-flowing aids for the inventive compositions are solids such as silicas such as micronized microcrystalline silica, fumed silica, sodium zirconium silica hydrogel, calcium silicate, silicon dioxide, microcrystalline cellulose, carbonates such as sodium carbonate or calcium carbonate, phosphates, such as tricalcium phosphate, sodium sulfonates such as sodium.

SUMM . . . normally employed. The unsaturated polyesters described above can be filled with various materials such as sulfur, glass fibers, carbons blacks, silicas, metal silicates, clays, metal carbonates, antioxidants, heat and light stabilizers, sensitizers, dyes, pigments, accelerators, metal oxides, such as zinc oxide, . . .

SUMM . . . rubbers, styrene-butadiene rubbers and the like, in the presence of absence of additives and fillers such as sulfur, carbon blacks, silicas, clays, carbonates, antioxidants, heat and light stabilizers, sensitizers, dyes, accelerators, zinc oxide, oils, blowing agents, etc.

DETD [0086] Solid t-butyl peroxy maleic acid, 85.0 g, 95% assay (based on active oxygen analysis), was weighed into a 500 ml beaker. Calcium carbonate, 15.0 g. . .

DETD [0087] Solid **t-butyl peroxy maleic acid**, 85.0 g, 95% assay (based on active oxygen analysis), was weighed into a 500 ml beaker. **Calcium stearate**, 15.0 g (Stavilor, 99.9% assay) was added, and the solids blended together using a plastic spatula for five minutes until. . .

CLM What is claimed is:

1. A free-flowing, solid, peroxide/diluent formulation comprising: 40-85% by weight of a solid **t-butyl peroxy maleic acid**, 15-60% by weight of a solid diluent selected from: salts of structure $(R-CO)_2O_x$ wherein x is an integer selected from. . .
2. A solid peroxide composition of claim 1 wherein the solid diluent is selected from the group consisting of **calcium stearate**, **zinc stearate** or sodium.
3. A solid peroxide composition of claim 2 comprising about 80% **t-butyl peroxy maleic acid** and about 20% **calcium stearate**.
5. A solid peroxide composition of claim 1 wherein the free-flowing agent is 0.5% amorphous **silica**.
6. A solid peroxide composition of claim 1 comprising 80% **t-butyl peroxy maleic acid**, 19% **calcium stearate**, and 1% **silica**.

NCL NCLM: 525/263.000
NCLS: 562/003.000

IC [7]
ICM: C08F255-00
ICS: C07C409-24

IT 7631-86-9, Silica, uses
(amorphous; preparation of stabilized and free-flowing solid tertiary-butylperoxy maleic acid compns.)

IT 557-05-1, Zinc stearate 1592-23-0, Calcium stearate
(preparation of stabilized and free-flowing solid tertiary-butylperoxy maleic acid compns.)

IT 1931-62-0, tert-Butylperoxy maleic acid
(preparation of stabilized and free-flowing solid tertiary-butylperoxy maleic acid compns.)

=> => d his

(FILE 'HOME' ENTERED AT 14:02:39 ON 07 JAN 2004)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 14:02:52 ON 07 JAN 2004

L1 91 S ?PEROXYMALEIC? ACID
L2 6 S ?PEROXY MALEIC? ACID
L3 97 S L1,L2
L4 50 S L3 (L) ?BUTYL?

FILE 'REGISTRY' ENTERED AT 14:03:55 ON 07 JAN 2004

L5 1 S 1931-62-0
E C8H12O5/MF
L6 727 S E3
L7 3 S L6 AND PROPENEPEROX?
L8 3 S L5,L7
SEL RN
L9 4 S E1-E3/CRN
L10 1 S L9 AND CA
L11 4 S L8,L10

FILE 'HCAPLUS' ENTERED AT 14:06:44 ON 07 JAN 2004

L12 128 S L11
L13 24 S (TBU OR TBUTYL OR TERTBUTYL OR (T OR TERT) () BUTYL OR BUTYL) ()
L14 0 S (TBU OR TBUTYL OR TERTBUTYL OR (T OR TERT) () BUTYL OR BUTYL) (L
L15 2 S LUPERCO PMA 25 OR PERBUTYL MA 25
L16 18 S TERT BUTYL PEROXYMALEATE
L17 0 S TERT BUTYL PEROXY MALEATE
L18 7 S TERT BUTYLPEROXY MALEATE
L19 4 S TERT BUTYLPEROXY MALEIC ACID
L20 10 S MALEIC MONOPEROXYACID (L) TERT BUTYL ESTER
L21 10 S MALEIC MONOPEROXYACID (L) BUTYL ESTER
L22 22 S TERT BUTYLPEROXYMALEIC ACID
L23 1 S 3 CARBOXY 2 PROPENEPEROXOIC ACID (L) DIMETHYLETHYL ESTER
L24 1 S TERT BUTYL PEROXY MALEIC ACID
L25 11 S LUPEROX PMA OR PERBUTYL MA
L26 1 S TERT BUTYL MONOPEROXY MALEATE
L27 143 S L12-L26
L28 2 S L27 AND (CA OR CALCIUM OR ZN OR ZINC) () STEARATE

FILE 'REGISTRY' ENTERED AT 14:15:42 ON 07 JAN 2004

FILE 'REGISTRY' ENTERED AT 14:15:51 ON 07 JAN 2004

L29 2 S 557-05-1 OR 1592-23-0
L30 1 S 57-11-4
L31 3702 S 57-11-4/CRN
L32 113 S L31 AND (CA OR MG OR PB OR BA OR CD OR ZN)
L33 109 S L31 AND (CALCIUM OR MAGNESIUM OR LEAD OR BARIUM OR CADMIUM OR
L34 114 S L32, L33
L35 22 S L34 AND 2/NC
L36 10 S L35 NOT IDS/CI
L37 100 S L34 AND C18H36O2
L38 10 S L37 AND L35
L39 10 S L36, L38
L40 9 S L39 NOT S/ELS
L41 90 S L37 NOT L38
L42 28 S L41 AND NR>=1
L43 62 S L41 NOT L42
L44 57 S L43 NOT (UNSPECIFIED OR IDS/CI)
L45 38 S L44 NOT MXS/CI
L46 34 S L45 NOT (COMPD OR WITH)
L47 32 S L46 NOT AYS/CI
L48 42 S L29, L30, L40, L47

FILE 'HCAPLUS' ENTERED AT 14:19:55 ON 07 JAN 2004

L49 1 S L48 AND L27

FILE 'REGISTRY' ENTERED AT 14:20:05 ON 07 JAN 2004

L50 1 S SILICA/CN

FILE 'HCAPLUS' ENTERED AT 14:20:10 ON 07 JAN 2004

L51 5 S L50 AND L27
L52 7 S (SIO2 OR SILICA OR SILCON DIOXIDE) AND L27
L53 9 S L28, L49, L51, L52
SEL DN AN 2
L54 1 S L53 AND E4-E6
E MYERS T/AU
L55 36 S E3, E35, E36
E ATOFINA/PA, CS
L56 613 S E2-E4
E ATO FINA/PA, CS
L57 1 S E5-E8
L58 2 S L27 AND L55-L57

L59 2 S L54,L58

FILE 'REGISTRY' ENTERED AT 14:24:00 ON 07 JAN 2004

FILE 'HCAPLUS' ENTERED AT 14:24:08 ON 07 JAN 2004

SET SMARTSELECT ON

L60 SEL L27 1- RN : 1114 TERMS
SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 14:24:13 ON 07 JAN 2004

L61 1114 S L60

L62 STR

L63 33 S L62 SAM SUB=L61

L64 521 S L62 FUL SUB=L61

SAV L64 LAVILLA804/A

L65 66 S L64 AND (LI OR NA OR K OR CA OR MG OR PB OR BA OR CD OR ZN OR

L66 18 S L64 AND (LITHIUM OR SODIUM OR POTASSIUM OR CALCIUM OR MAGNESI

L67 66 S L65,L66

L68 17 S L67 AND NR>=1

L69 32 S L67 AND PMS/CI

L70 25 S L67 NOT L68,L69,L48

L71 2 S L70 AND C8H16O2

L72 1 S L71 NOT CO/ELS

FILE 'HCAPLUS' ENTERED AT 14:30:17 ON 07 JAN 2004

L73 1 S L72 AND L27

L74 1 S L27 AND MINERAL(L)OIL

L75 2 S L59 AND L1-L4,L12-L28,L49,L51-L59,L73,L74
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 14:31:46 ON 07 JAN 2004

L76 4 S E1-E4

FILE 'HCAPLUS' ENTERED AT 14:32:20 ON 07 JAN 2004

FILE 'USPATFULL, USPAT2' ENTERED AT 14:32:50 ON 07 JAN 2004

L77 33 S L11

L78 452 S L13-L26

L79 463 S L77,L78

L80 3 S L79 AND L48

L81 38 S L79 AND (CA OR ZINC OR CALCIUM OR ZN)()STEARATE

L82 28 S L80,L81 AND (L50 OR SIO2 OR SILICA OR SILICON DIOXIDE)

L83 18 S C07C409-24/IC,ICM,ICS

L84 2 S C08F/IC,ICM,ICS AND L83

L85 1 S L82 AND L83

L86 11 S (562 OR 525)/NCLM,NCLS AND L82

L87 1 S L85 AND L77-L86

FILE 'USPATFULL, USPAT2' ENTERED AT 14:42:47 ON 07 JAN 2004

FILE 'HCAOLD' ENTERED AT 14:42:59 ON 07 JAN 2004

L88 9 S L11

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